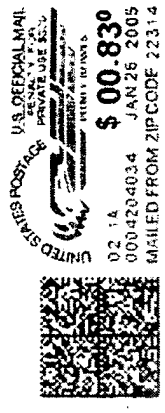


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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22852 7590 01/26/2005

FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER

SEAMAN, D MARGARET M

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 01/26/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,220	06/27/2003	Eric Bacque	3806.0520-01	5717

TITLE OF INVENTION: HETEROCYCLYLALKYLPYPERIDINE DERIVATIVES, THEIR PREPARATION AND COMPOSITIONS CONTAINING THEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	04/26/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

Complete and send this form, together with applicable fee(s), to: **Mail**

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Alexandria, Virginia 22313-1450  
(703) 746-4000**

or **Fax**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

22852 7590 01/26/2005  
**FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413**

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,220	06/27/2003	Eric Bacque	3806.0520-01	5717

**TITLE OF INVENTION:** HETEROCYCLYLALKYLPYPERIDINE DERIVATIVES, THEIR PREPARATION AND COMPOSITIONS CONTAINING THEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	04/26/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
SEAMAN, D MARGARET M	1625	546-180000

**1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).**  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

**2. For printing on the patent front page, list**  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

**4a. The following fee(s) are enclosed:**

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

**4b. Payment of Fee(s):**

- ☐ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

**5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,220	06/27/2003	Eric Bacque	3806.0520-01	5717
22852	7590	01/26/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			SEAMAN, D MARGARET M	
			ART UNIT	PAPER NUMBER
			1625	

DATE MAILED: 01/26/2005

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 6 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 6 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

**Notice of Allowability**

Application No.

10/607,220

Applicant(s)

BACQUE ET AL.

Examiner

D. Margaret Seaman

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper dated 9/20/2004.
2. ☒ The allowed claim(s) is/are 20-34.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/987,386.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

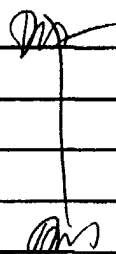
1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
D. Margaret Seaman  
Primary Examiner  
Art Unit: 1625

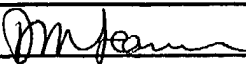
## INFORMATION DISCLOSURE CITATION

Atty. Docket No. <b>3806.0520-01</b>	Appln. No. <b>Unassigned</b>
Applicant <b>Eric BACQUÉ, et al.</b>	
Filing Date <b>Concurrently</b>	Group: <b>Unassigned</b>

U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate

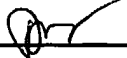
FOREIGN PATENT DOCUMENTS							
		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
	1	WO 00/43383	27 JUL 00	PCT			published in English
	2	WO 99/37635	29 JUL 99	PCT			published in English
	3	WO 00/21948	20 APR 00	PCT			published in English
	4	WO 00/68199	16 NOV 00	PCT			published in English
	5	WO 98/13350	2 APR 98	PCT			published in English

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	

Examiner 	Date Considered <b>1/21/05</b>
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
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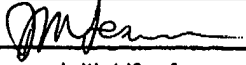
## INFORMATION DISCLOSURE CITATION

Atty. Docket No. 3806.0520-01	Appln. No. 10/607,220
Applicant Eric BACQUÉ, et al.	
Filing Date June 27, 2003	Group: 1625

U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	1	6,403,610	11 JUN 02	Malleron et al.			

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		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No

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## INFORMATION DISCLOSURE CITATION

Atty. Docket No.	3806.0520-01	Appln. No.	10/607,220
Applicant	Eric BACQUÉ, et al.		
Filing Date	June 27, 2003	Group:	1625

## U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate

## FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1	Beilstein Record No. 8052872, <i>Beilstein database</i> (1999).
2	Beilstein Record No. 1256021, <i>Beilstein database</i> (1988).
3	Beilstein Record No. 1256022, <i>Beilstein database</i> (1988).
4	Beilstein Record No. 1291589, <i>Beilstein database</i> (1988).
5	Beilstein Record No. 8051038, <i>Beilstein database</i> (1999).
6	Beilstein Record No. 8052871, <i>Beilstein database</i> (1999).
7	Arzel, Erwan, et al., "New Synthesis of Benzo- $\delta$ -carbolines, Cryptolepines, and Their Salts: In Vitro Cytotoxic, Antiplasmodial, and Antitrypanosomal Activities of $\delta$ -Carbolines, Benzo- $\delta$ -carbolines, and Cryptolepines," <i>J. Med. Chem.</i> , 44:949-960 (2001).
8	Bell, S.L., et al., "Polyhalogenoheterocyclic Compounds, Part 37 [1]. Perfluorotetrahydroquinoline, -isoquinoline, and Related Compounds," <i>J. Fluorine Chem.</i> , 32:403-414 (1986).
9	Brooke, Gerald, M., et al., "Remarkable Orientational Effects in the Displacement of the Fluorine from Heptafluoro-isoquinoline and -quinoline towards Sulfur Nucleophiles. Further Reactions with Oxygen Nucleophiles," <i>J. Chem. Soc. Perkin Trans.</i> , 18:2201-2209 (1993).
10	Chambers, R. D., et al., "Hexafluorocinnoline: Synthesis and Photochemical Isomerisation of Hexafluoroquinazoline," <i>J. Chem. Soc. D: Chem. Comm.</i> , 12:739-740 (1970).
11	Chambers, R. D., et al., "Polyfluoroheterocyclic Compounds. Part XVIII. Reactions of Heptafluoroquinoline and -isoquinoline and Pentafluoropyridine with Hydrogen Halides," <i>J. Chem. Soc. (C) Org.</i> , 61-67 (1971).
12	Lee, Jae Keun, et al., "Quinolone(II): Synthesis of Fluoro-substituted Pyrido[3,2-h] quinolone Derivatives as Potential Antibacterials," <i>Korean J. of Med. Chem.</i> , 4(2):92-100 (1994).
13	Matthews, R. S., " $^{19}\text{F}$ n.m.r. Spectra of Polyfluoroquinolines. Long Range Interring $^{19}\text{F}$ - $^{19}\text{F}$ Coupling Constants and $^{19}\text{F}$ Chemical Shifts," <i>Organic Magnetic Resonance</i> , 8:240-245 (1976).

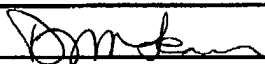
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## INFORMATION DISCLOSURE CITATION

Atty. Docket No. 3806.0520-01	Appln. No. 10/607,220
Applicant Eric BACQUÉ, et al.	
Filing Date June 27, 2003	Group: 1625

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
14	Morgan, John C., et al., "Syntheses of Some Indazoles Structurally Related to Equilenin (I)," <i>Journal of Heterocyclic Chemistry</i> , 8:61-63 (1971).
15	Van den Ham, D. M. W., et al., "Photoelectron Spectra of Some Fluorine Substituted Diazanaphthalenes," <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2:247-258 (1973).
16	Van den Ham, D.M. W., "Preparation of Hexafluoro-1, 8- and -2,7-Naphthyridine," <i>Journal of Fluorine Chemistry</i> , 5:537-544 (1975).

Examiner 	Date Considered 1/21/05
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